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J. G. MARSLAND, VK3NY.

TECHNICAL EDITOR:

J. C. DUNCAN, VK3VZ.

TECHNICAL STAFF:

L. B. FISHER, VK3AFF.

COMPILATION:

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EDITORIAL



T.V. AS SHE IS SEEN

Radio Amateurs recently returned from abroad have given us some interesting reactions to T.V. as practiced in U.K.

England, with its 40 odd million people, is fed with a single channel of what we would call "A" class T.V. Recent events over there indicate the trend towards mixing in a flavour of "B" class or commercial advertising.

Wave propagation at T.V. frequencies gives comparatively short-range results. The problems of the T.V. technicians in this very large country of ours will be great. As we have read, marked, learned and mentally digested, we see the design for T.V. here as a single channel National Station using an amount of time which finance will allow for "A" class productions. The balance of the time may possibly be sold to "B" class stations for advertising and what-have-you. Viewers would benefit greatly by the competition created. Let us hope such an idea would not be ultra vires the Commonwealth Constitution for it is sound both economically and technically.

The U.K. Amateurs have a privilege we are striving to establish for the Australian Amateur. Over there frequencies of 420-5.650 Mc. and 10,000 Mc. are available to Amateurs

individually and collectively. Numerous T.V. clubs have developed their own T.V. propagation; so also have some individuals. The enterprise of some of the Radio Amateurs here in Australia is not less than that of his brother Amateur in U.K., although in Australia we are going to find it hard to obtain suitable gear for use at 420 Mc. and higher. This suggests the allocation of frequencies around 148 Mc. for our use, subject of course, to a strong but impartial control of T.V.I. The people of this country want T.V.; they will get T.V., even though for the moment perhaps it cannot be afforded. They will also surely get T.V.I.; such T.V.I. will not all emanate from Amateur transmitters either, except possibly from a few of the "not-so-careful" variety.

The authorities must grant us our rightful place in the T.V. planning now in process; the ability to spend our own capital; to go on the air and experience the intricacies of T.V.

It is difficult to estimate the direct and indirect value to the Nation of encouraging us to work on this highly technical development. Stifling our enterprise and initiative could easily prove to be tragical. Therefore let the encouragement we deserve be displayed by giving us our place "on the air with T.V."

—FEDERAL EXECUTIVE.

THE CONTENTS . . .

A Special Multiband Antenna	2	Fifty Megacycles and Above	8
The 1953 Urunga Convention	5	Prediction Chart for May, 1953	8
W.I.A. National Field Day, 1953, Results	5	Convention Dinner	10
DX Notes by VK7RK	7	It Did Happen In England	11
Amateur Call Signs	7	Federal, QSL, and Divisional Notes	13

A Special Multiband Antenna

BY HANS J. ALBRECHT,* VK3AHH

It is well known that the antenna is the most important component at any transmitting station. Its type and construction may enable us to gain quite considerable power in certain directions. It is relatively easy to obtain a maximum field intensity in one direction in one restricted frequency range, as for instance one Ham band.

This is usually done by combining several half-wave dipoles in a collinear or parallel array with the corresponding phase differences which are either obtained by mounting parasitic elements in the correct distance or by using driven elements in the correct distance and driven in the right phase with respect to the main element. Such systems are normally called "beams." If the array can be rotated, mechanically or electrically, a well-performing antenna is obtained—but only for one band, because (i.) the phase relation of all rays originating at each element and arriving at a distant point is changed as the operating wavelength is altered and thus the radiation pattern is different, and (ii.) a considerable mismatch occurs in a flat transmission line when the band of operation is changed. Moreover, beams of such a kind become impracticable on frequencies below 14 Mc. because of their physical dimensions.

Thus ordinary wire antennae are still very common for multiband operation. They can be used on all bands in harmonic relation, as is generally known, if resonant transmission lines are employed. The length may be made fairly long compared with the operating wavelength if enough space is available and thus the antenna can be

directive with considerable gain in its main lobes with respect to the intensity of a reference radiator, i.e. the isotropic radiator or half-wave dipole.

Beside a satisfactory directivity in the horizontal plane, an antenna for DX work should have a low vertical angle of radiation to secure favourable reflection conditions at the ionospheric layer. On the other hand, it must be remembered that radiation with a vertical angle below about three degrees is generally lost because of ground losses.

In the following, the writer wants to describe a special type of long-wire antenna, particularly designed for DX work on all bands lower than 30 Mc. and general communication on 7 and 3.5 Mc.

Its main features may be listed as follows:—

- (1) The radiation is concentrated in a low vertical angle with several main lobes in the horizontal plane.
- (2) The directions of the main lobes may be changed by operating a simple switching device, maintaining the low angle of radiation.
- (3) The gain at low vertical angles is considerable in the main lobes.
- (4) The single components of the complete antenna may be combined in various manners so that almost all directions may be covered on all bands lower than 30 Mc. and higher angles may conveniently be obtained below about 8 Mc.
- (5) The antenna does not require much space and the cost of its construction is negligible compared with that of a beam system.
- (6) Its operation is simple and no critical adjustment is required.

GENERAL DESCRIPTION

The antenna consists of a horizontal section and a semi-vertical one. Each section is 67 feet long, thus a full wavelength on the 20 metre band, which we shall take as the reference band for this description. Two poles hold the horizontal portion at a height of about 30 feet, while the semi-vertical section slopes down at an angle of about 26 degrees (with respect to ground) as shown in Fig. 1. The bottom end is held about one foot above ground by means of a small post. Both portions are of course insulated at both ends and at their junction which is the feeding point.

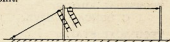


Fig. 1.—Layout of Antenna.

The feeder used at the writer's station consists of two separate tuned open-wire lines, each of which is supplying power to one section. A so-called triple-wire feeder may, however, be substituted without affecting the final result. (Such a triple-wire feeder is often used with centre-fed full-wave antennae in order to change the phasing relation between both sides and thus the radiation pattern.)

The separate feeder lines or one triple-wire feeder allow both sections to be used separately or both combined and fed (a) in phase, or (b) 180 degrees out of phase.

The length of the feeder has to be such that it operates as a resonant open-wire line on all bands desired. Thus the lines were made about 34 feet long, i.e. a quarter-wave on 7 Mc. (The use of longer lines is impracticable at the writer's station, but in spite of this, the antenna works, of course, on 80 metres for general communication.)

Fig. 2 shows how the different phase connections are obtained at the antenna coupling unit which is of ordinary

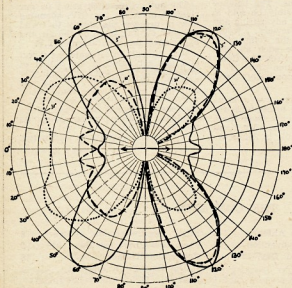


Fig. 5.—Pattern when both sections are fed in-phase.

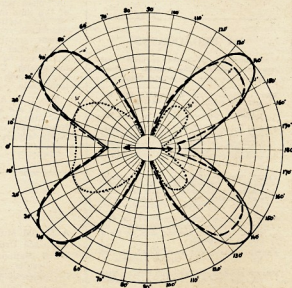


Fig. 6.—Pattern when both sections are fed out-of-phase.

* 10 Belgavia Ave., Box Hill North, E.12, Vic.

construction for both series and parallel feeding and therefore does not require any further description. As indicated, only the external feeder wires, i.e. those being connected to the sections directly, are utilised in the in-phase connection which is illustrated by Fig. 3. The two inner conductors are not used in this phase connection.

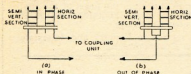


Fig. 2.—Connection of feeder lines at the antenna coupling unit. (a) In-Phase; (b) Out-of-Phase.

If, on the other hand, out-of-phase operation is desired, both outer wires are tied together and connected to the hot side of the coupling circuit, while the two inner conductors are also tied together and form, in such a way, the other conductor of the combined feeder. Fig. 4 shows how the desired out-of-phase condition is thus obtained. Single operation of any of the two sections is of course carried out in the normal manner and does not require any further comment.

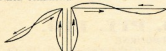


Fig. 3.—In-Phase Condition.

RADIATION PATTERNS

The 20 metre band radiation patterns of the complete antenna were theoretically calculated by the writer for both phase connections. The theoretical results were proved by numerous antenna tests with stations situated in all possible directions and Continents. If any of the two sections is operated separately, the patterns are approximately those given in any handbook for full-wave antennae (with respect to 20 metres). (It must, however, be remembered that in the case of a semi-vertical full-wave antenna, the low angle of radiation is increased substantially in some directions which can be realised by considering the pattern of the original horizontal full-wave antenna to be a solid one. It may here be mentioned that the conversion of a horizontal full-wave end-fed antenna to a semi-vertical one often results in a large improvement in its DX performance.)

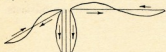


Fig. 4.—Out-of-Phase Condition.

Figures 5 and 6 show the radiation patterns computed for both phase connections of the complete long-wire. The semi-vertical section is always situated toward the left-hand side of both figures. Each pattern is given for three vertical angles of radiation, namely for 5, 10, and 30 degrees. It is obvious that the patterns for 5 and 10 degrees are those of greatest interest

for DX work. It may be seen that in both phase connections the intensity is compressed in low angles of radiation. The fact that the 30 degrees pattern is usually of lower intensity indicates that clearly.

Fig. 5 shows the pattern when both sections are fed in phase while the out-of-phase connection is represented in Fig. 6.

Comparing both diagrams, we clearly notice the change in the directions of maximum intensity in the horizontal plane. Thus different directions may be covered by changing the phase connection, while the favourable low angle of radiation is maintained. An intensive

main lobe in the direction of the wire may be obtained by using the semi-vertical section alone.

As the frequency of operation increases, i.e. on the 21 and 28 Mc. bands, the directions of maximum intensity tend to approach the direction of the wire. The pattern for 40 metre operation is in the in-phase connection that of "two half-waves in-phase," i.e. a sharp lobe perpendicular to the direction of the wire, and for the other phase connection we have a slightly distorted pattern of a full-wave antenna. Patterns for single operation of each section are self-explanatory.

(Continued on Page 8)

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The 1953 Urunga Convention

W.I.A. National Field Day, 1953, Results

It is now Tuesday, 7th April, and for many, the 1953 Urunga Convention has ended, but for those remaining at the scene of the activities, peace and quiet will have begun to reign once more.

Attendance this year was not as high as in 1952, but I feel certain that the fellowship amongst those present was enhanced rather than diminished by the lack of numbers. In all, 35 call signs, 7 associates, and 15 relatives or friends were registered, a grand total of 57.

It was very pleasing to see the attendance of the N.S.W. Division President, John 2JU, and Hon. Sec., Dave 2EO. John had a very enjoyable time and was last seen stripped to the singlet and shinning the rafters in the "Do Me" shack whilst Jean Dan kept his famous pipe in production. Dave also had a wicked gleam in his eyes and some of the stories he told would make even Satan blush! The "Iron Horse," George 4GG, was again present and many old acquaintances were renewed and new ones made. Also Jim 4PR re-acquainted us with our old friend, Pedro the bandino.

Apologies were received from many including Hart 2JC, Russ 2WT, whilst Dave 2AYE sent a radiogram from aboard the S.S. Manoroa at sea advising that he had resigned the "Consulship" of Bondi and was now contemplating taking out a VK6 call sign. Letters were also received from "The Monitor," Fred Leader, of New Zealand, wishing the Convention every success and passing 73s to all present.

No Convention can of course proceed smoothly without good organisation which provides for quick action when the unexpected arises, and the work put in by various people to this end is probably not generally realised. All those present will, I am sure, be pleased to acknowledge the efforts put in by 2XO, 2ACU, 2FH, 2AVG, 2NX, Jean Dan, Jean Retallick and their helpers in turn whom they called on from time to time.

Many things happened behind the scenes which will probably never be told, but without which the Convention would not have been the success it proved. I know of some of the things, others other things. Collectively they made for the smooth running of the gathering, and I can assure all readers that the extensive work and personal inconveniences undertaken willingly by the organisers and their helpers was for one purpose only, to make the Convention successful for their fellow radio operators and their guests.

The lack of registration this year did not give the Convention a clean balance sheet, but some very generous donations squared the budget. Naturally this state of affairs is not desirable and it is hoped that 1954 Convention will be on a sounder footing financially. It is doubtful if the '53 Convention could be exceeded for friendship or enjoyment and the same fellowship will be available in 1954. The Committee is hoping that more fellows will avail themselves of the good times to be had next Easter.

The following is a list of those whose names appear on the official registration sheets. There were other folk who visited the Convention for short periods, but did not register due to the briefness of their stay:

George 4GG, Yarraman; Tom 4PD, Brisbane; Jim 4PR, Brisbane; Leith 2EA and Merrin, Kangaroo Creek; Dave 2EO, Sydney; John 2JU, Sydney; Alan 2FH, Sydney; John 2GA, Woy Woy; Hart 2JC and Elsie, Narrabri; Jack 2JK, Coff's Harbour; Ken 2KG, Newcastle; Cec 2KR, Woy Woy; Shorty 2NX, Newcastle; Keith Harland, Newcastle; Varley 2SF, Newcastle; Bruce 2SN; Alf 2UC, Lismore; Stan 2UY, Newcastle; Crieft 2XO and Jean, Raleigh; Bill 2XT and Mrs. H.L. Newcastle; John 2AAF, Sydney; Alec 2ABU and Jean, Sydney; Ted 2ACD, Sydney; Rod 2ACU, Coomandack; Jack 2ADN and Shirley, Coff's Harbour; Martin Hunt and Bonnie Wheatley, both of Coff's Harbour; Bill 2AEY, Taree; Alec 2AGG, Sydney; Harold 2AHA and Joyce, Mrs. Whyte, Snr., and "Pop" Whyte, Newcastle; Ken 2AJT, Ballina; Ron 2ASJ, Newcastle; Don 2ASW, Sydney; Ted 2AVG, Sydney; Bill 2AWG, Coff's Harbour; Harold 2AWH; Ken 2AXZ, Sydney; and Associates Gordon and Eunice Gilmore, of Lismore; Les and Norma Sparrow, Newcastle; Norm Dash, Kempsey; Bill Mitchell; Syd Daniels; Webb Cooper, Armidale; Harry Knight, Coff's Harbour.

There were others present whose call does not appear on the official list and included 2PA, 2QV and probably others not known to me, whilst others including Ken 2APB called in for a few hours as time or work permitted.

The competitions were conducted under the supervision of a central control station and were smooth in operation. Average number of entrants was eight and performances were greatly aided by the reasonable condition of the bands and the friendliness of the competitors. The results were:—

- (1) The Gerry Challenger Memorial Contest: 1st, Don 2ASW, 194 pts.; 2nd, Peter 2PA, 155 pts.; 3rd, Harold 2AWH, 135 pts.
- (2) The 144 Mc. Hidden Tx Hunt: 1st, 2PA/2AHH (as a team); 2nd, 2AHA; 3rd, 2NX.
- (3) The Fred Leader 144 Mc. Hunt: 1st, 2AEY; 2nd, 2AHH/2PA; 3rd, 2KG.
- (4) The Urunga Scramble: 1st, 2ASJ, 40; 2nd, 2AWH, 39.
- (5) Best drawing room story, the "old horse," 4GG; (6) Ladies' mystery voice comp., Jean Dan; (7) Ladies' quiz comp., Marie Hunt; (8) Ladies' house comp., Marie Hunt; (9) Ladies' lucky door number, Marie Hunt; (10) Gents' lucky door number, Leith 2EA.

Everybody, I'm sure, will join with me in extending congratulations to Ron 2ASJ on his popular win in the Scramble and all will agree that 40 contacts in an hour is really good going and Ron really deserved his victory.

Before closing, the Convention's thanks must be extended to Ted Hamey who, with his usual enthusiasm, brought his projector and films from Coff's Harbour to give us a glorious insight

The results of the 1953 National Field Day, as published herewith, and although only 17 logs were submitted, the Contest was more popular than in past years, as in addition to the logs submitted at least 15 other portable stations were in operation.

The winner of the Open and Phone Sections was VK2ASW with very creditable totals of 280 and 239 points respectively. The C.W. winner was VK2ASJ and Fixed Station VK3AHH. State winners to whom Certificates will be issued include: Open—VK3ALQ, VK7SR; Phone—VK3LN, VK7FM; and C.W.—VK3YS.

OPEN SECTION

	Points
VK2ASW	280
VK2ASJ	226
VK3ALQ	206
VK7SR	150
VK3YS	62
VK3ZM	23
VK2RK	6

PHONE SECTION

	Points
VK2ASW	239
VK3LN	159
VK2ASJ	113
VK3AID	49
VK7FM	26
VK7AL	23

C.W. SECTION

	Points
VK2ASJ	163
VK2ASW	91
VK3YS	56

FIXED STATION SECTION

	Points
VK3AHH	28

—Federal Contest Committee.

into the growing and marketing of Flowers in Holland. To our entertainers from Bellingen we also owe our thanks, as we also thank Mrs. (Mrs. 2QV) and Ina Alexander (Mrs. 2PA) for their lovely singing.

The people of Bellinger Shire and the township of Urunga in particular made us all feel at home and we thank Councillor Raymond and Mrs. Cooper for their kind words of welcome.

Donors of prizes, etc., are all thanked for their generosity and any who played a part in the smooth running of the Convention for the benefit of all those who had the pleasure of attending.

Quite a few humorous incidents occurred some of which would take too long to tell, and others too numerous to mention. If you want to hear some of them, ask Crieft about the stories on the tape recorder, Peter 2PA of his adventures water ski-ing, Don 2ASW about his adventures with Yvonne, Rod Pike and his boys, Alec Dan and his motor scooter, Pedro 4PR and his motor scooter trip from Brisbane to Coff's Harbour, John Moyle about Dorrigo Mountain. All these things, as you know, make up life at its best and I can only say to those who weren't there—be there next time.

—Noel Hansen, 2AHH.

Waltham

DISPOSALS!

RADIO TRANSCEIVER AND INDICATOR UNIT V.H.F. Approximately 180 Mc.

Type 1045. Valve line-up in Transceiver: 2—RL18, 1—VR135, 1—5V4, 1—EA50, 1—RL37, 6—EF50, 1—6SN7, 1—GL2050 (Thyatron), 2—VR150/30 (Voltage Regulators), 1—884 (Gas Triode). This unit also contains a motor driven Selector Switch, two superbly designed Polystyrene six-position rotary Coil Turrets, and an I.F. Transformer strip ideally suitable for use with Television. Band width 10 Mc. Indicator Unit, Type 1047. Valve line-up: 7—EF50, 1—879, 1—VR54. Also contains a 3,000 type Relay 2,000 ohms, ten assorted Potentiometers, a two-bank Ceramic Wafer Switch, and an illuminated scale (5BP1 tube and shield not included).

These two Units are brand new, and are packed together in their original packing cases.

PRICE £21/10/- the two.

Transceiver £15/0/0 } if supplied separately.
Indicator Unit £7/10/0 }

TRANSMITTER-RECEIVER

Type RT34/APS13, Frequency Modulator, approx. 450 Mc. Valve line-up: 9—6AC5, 5—6J6, 2—2D21, 1—VR105. Also contains Dynamotor, input 27v. 1.5a., output 285v. 60 Ma. Price £17/10/-.

TRANSMIT. CONDENSERS

50 pF. two-gang .. £2/10/-

B.U.D.

50 pF. Midget Dual £1/17/6

55 pF. Single, Junior £1/5/-

18 pF. Single, Junior £1/10/-

25 pF. Dual Junior

U.H.F. £2/10/-

35 pF. Single gang Dual

Spaced 17/6

33 pF. max., 4 pF. min. Neut. Condensers, plate gap 0.078 inch .. £1/10/-

Feed Through Neut. Condenser plate dia. 1.27/32 inch £12/5/-

80 pF. per Section, Dual

Junior £2/10/-

150 pF. per Section Dual

Junior £3/10/-

200 pF. per Section, Dual

Junior £3/10/-

Post. & Pack.: Vic., 4/-; N.S.W., S.A., Tas., 5/-; W.A., Qld., 5/6.

COMMAND RECEIVERS

BC453 190-550 Kc. £12/10/-

BC454, 3-6 Mc., £7/10/-

BC455, 6-9.1 Mc., £7/10/-

COMMAND XMITTERS

BC457, 4-5.3 Mc., £7/10/-

BC458, 5.3-7 Mc., £7/10/-

BC459, 7-9.1 Mc., £7/10/-

COMMAND RECEIVER CONTROLS, Type BC450

3 Slow Motion Dials, 6 Single pole double throw Switches, 4 Miniature Jacks, 3 Volume Controls (approx. 5,000 ohms). Price £1/15/-.

Post. & Pack.: Vic., 6/-; N.S.W., S.A., Tas., 8/6; W.A., Qld., 11/-.

AERIAL CONTROL BOX

Type 442A, contains 50 pF. Western Electric Condenser, Aerial Indicator Meter 0-10 amp. Thermo-couple, 24v. miniature Relay, and useful connecting terminals. Price 25/-.

Post. & Pack.: Vic., 3/6; N.S.W., S.A., Tas., 4/-; W.A., Qld., 4/6.

MODULATING UNIT

Type 169, containing Klystron Tube, three Neon Stabilisers, one EF50, two half-wave Selenium Rectifiers, one 5U4 Rectifier, one CV85, Potentiometers, gears, Resistors, high voltage Condensers and Transformer. Price £4/19/6.

319-321 SWANSTON STREET
393 FLINDERS STREET, MELBOURNE

Address all Correspondence to Box 5234, G.P.O., Melbourne.

Write for our latest Bargain Catalogue.

DYNAMOTORS

Westinghouse, input 24v. 7a., output 540v. 250 Ma., Price £3/10/-.

Post. & Pack.: Vic., 7/3; N.S.W., S.A., Tas., 10/6; W.A., Qld., 14/-.

Bendix, input 24v. 13a., output 300v. 260 Ma., 150v. 10 Ma., 145v. 50 Ma. Price 29/6.

Western Electric, input 24v. 11a., output 250v. 0.06a. Price 32/6.

Post. & Pack.: Vic., 4/9; N.S.W., S.A., Tas., 6/-; W.A., Qld., 7/6.

TRANSMITTING TUNING

UNITS by General Electric

Type TU10B, 10,000 to 12,500 Kc. £2/10/-

Type TU7B, 4,500 to 6,200 Kc. £2/10/-

Type TU6B, 3,000 to 4,500 Kc. £3/10/-

Type TU9B, 7,700 to 10,000 Kc. £2/10/-

CONTROLLER, TYPE 4

Aircraft Transceiver remote control. Containing a 5-bank cancelling push-button switch, lock and non-lock; P.M.G. type Key Switch, small two-way Plug, and five small bezels and lamp holders. Price 17/6.

Post. & Pack.: Vic., 6/6; N.S.W., S.A., Tas., 8/-; W.A., Qld., 7/6.

SELENIUM RECTIFIERS

300 volt 80 Ma. 12/6

200 volt 40 Ma. 8/6

Post. & Pack.: Vic., 3/6; N.S.W., S.A., Tas., 4/-; W.A., Qld., 4/6.

TRANSMITTERS

Type TR3548

Containing Valves: 1 Rectifier VU111, 1 EF50, 1 10 C. Magnetron Valve complete with magnet, 1 Crystal Diode Type 1N21; and 1 24v. Blower Motor. Brand new. Price £5/19/6.

HAND GENERATORS

Gibson Girl Hand Crank Generators. Output: high voltage 250v. 100 Ma., low voltage 6-8v. 2 amp. Ideal for conversion to power supply for portable transmitter. Also suitable for conversion to Wind Battery Chargers. Price £4/10/-.

Post. & Pack.: Vic., 5/-; N.S.W., S.A., Tas., 6/-; W.A., Qld., 8/6.

COMMAND MODULATOR UNIT, Type BC456E

Containing 1—12J5, 1—1625, 1—VR150/30, 3—24v. Relays. New condition. Price £5/-/-

ASB TRANSMITTERS

Containing six Acorn type Transmitting Valves, high voltage vacuum Relays, and many other useful components. Price £37/17/6.

ASB RECEIVERS

800 Mc. approx.

Valve line-up: 2—955 (Acorn triodes), 8—6AC7, 1—455, 1—6H6. Also contains eight H.F. I.F. Transformers and 0.001, 0.003 uF. mica condensers. Price £29/19/6.

BENDIX RADIO AZIMUTH CIRCLE LOOP AERIAL CONTROLS, Type MN22A

Price 35/-.

Post. & Pack.: Vic., 4/9; N.S.W., S.A., Tas., 6/-; W.A., Qld., 7/6.

CRYSTALS

500 Kc. mounted on panel with various other useful components. Price £1/10/-.

Post. & Pack.: Vic., 3/6; N.S.W., S.A., Tas., 4/-; W.A., Qld., 4/6.

METERS

Special Offer. Three R.F. Meters, amp. or milliamper, various ranges, all in good condition. Useful for conversion and re-calibrating. Three for 22/6 Post Free.

HEADPHONES

Low Imped. 500 ohms, 12/6
High Imped. 2000 ohms, 25/-
Post. & Pack.: Vic., 3/6; N.S.W., S.A., Tas., 4/-; W.A., Qld., 4/6.

STABILVOLT. VALVES

280 volt, 80 Ma. 25/-
280 volt, 40 Ma. 20/-
150 volt, 20 Ma. 15/-
150 volt, 30 Ma. 15/-
150 volt, 15 Ma. 10/-
EF50 12/6
VT61 10/-
6A6 10/-
1204 R.F. Pentode, 6v., complete with socket 3/11
Postage & Pack.: All States, 5/-.

DX NOTES BY VK7RK*

Activity this month seems to be hitting the low spots, reports coming in being very few and far between combined with my own comparative inactivity making it somewhat difficult to make the column interesting. To those who did find the time to drop me a line, let me say "Many thanks," and to those who could not, "I could do with it."

One point worth considering is that by the time this reaches you we will have completed our first year of 21 Mc. operation and it is interesting to recall how the band has behaved. In all it has been everything that could be expected of it, taking into account current conditions, and gives promise of really first class working at a later date. At appropriate times, most continents have been worked with ease, South America being the stumbling block and the only QSO I have a record of is VK2AWU to CE. Others have no doubt a South American QSO under their belt but not many.

Those of you who heard and worked VQ4HJP around last September will have no doubt as to the African contacts available, while the pile of Europeans during evenings in October, November, and December give the pointer for this continent. At the moment we are back where we started with some fine ZL contacts and occasional W and Central Americans. However, to summarise the bands for the month.

3.5 Mc. came to life with a bang during the W/Ve Contest, which bears out the old, old contention that with sufficient activity conditions are not nearly as bad as they seem. **3AHH** was indicative of quite a few of the gang in working all W districts. Heard with a consistently strong signal, but of course not interested in working VKs, was KP4KD.

7 Mc. bore the brunt of the W/Ve working being consistently good from 0630z to 1600z. Europeans are still good by losing a few hours of the morning sleep. Calls heard here include G, F, ON, HB9, YU, EA2DM, EA7DW, CT1EL. **Don Granley** heard most of his Europeans over the long path and lists IIDSU, YU2AKL, CT1DJ, GW3AKB, UBSKAB, EA1BC, MB9CA, OE13HL, UA1KAC, UA0BKY, FA8CR and FK8BD. On phone everyone seems to have worked the Ws and to these **4XJ** adds FI9AC and **3AHH** adds HC1GF and UBSAL.

14 Mc. at the moment does not bear predicting as it changes so rapidly. An example of this was given here on two successive afternoons. The first one, between 0600z and 0615z all continents except Europe were at good strength, prefixes being ZS, SU, W, VE, KI7, CO, KZ5, HR, CE, JA, and FK8. The following afternoon at exactly the same time the only DX audible were Europeans and they were there in abundance, so how would the prediction service explain that away?

9YY comes up with a very interesting letter and seems to have kept himself extremely busy during the month working DL1DX, OE1CD, F8BS, SM7AVA,

OE13HL, OH2NB, OZ8JB, DU1CV, KG6ABI, VU2AR, ZS1EB, ZS50H, ZS2CR, ZSSKU, CR7BC, VK1RR, KZ5GH, CE4MX and a host of Ws. You don't think that would keep him busy for the month? Well let me tell you guys, Alan managed to squeeze in enough time also to get himself an XYL, so if that's not being busy, I don't know it. Anyway, congrats Alan and maybe this time next year you will be able to check on DX during the wee small hours.

2AOU comments that as we are just about at the bottom of the hill in sunspot activity, things can't get much worse, but Hans seems to be getting along with quite a few stations, working KG6AEJ, DL1LH, KA3RR, VS6CL, VK9RC, SM5WL, SM5ACC, IISM all on phone, and heard (on phone): HR1BG, VS7RA, VU2NB, CN8EY, VS1ES, VS6CG, CT1CP, KW6BI, KI7ZG, HR1KS, KX6BB, ZM6AA, and KTIWX. Hans summarises the band by saying the Ws from 0500-0700z, Central Europe and down to North Africa 0700-0830z, while 1000-1130z is still best for Northern Europe. **3AHH** lists the usual run on c.w., plus KW6BI and VE8TC, and on phone HR1BG, FO8AI and XZ2SS.

MF2AE provided the only new one for **7RK**, the new ones come very slowly now. Others for the month were CO2OE who puts in perhaps the strongest signal from Central America, and FK8AE, VS6CG, CR9AF, FO8AI, KJ6AX, KM6BG, ZS2BC, HR1AT, KZ5FI, ZS2HI, YU3BC, SU1HS, OH7OL, OH5NK, SM5AHW, PA0SP. On phone, ZM6AA and VS1ES.

21 Mc. has been commented on up the page a little and if you have patience enough to listen more often, some good QSOs will reward you. **3AHH** lists on c.w., apart from ZLs, VR2CG and VS1FE; on phone, KH6YL and VS6BE. **7RK** heard on phone KH6AR, TI2EV, HP3FL—the latter two at 0100z. HP3FL runs 500w. to a vee beam pointed in our direction. **2AWU** beat me to the contact, so Walter is evidently still watching 21 Mc. Apart from some very strong ZL signals on c.w., an occasional W, usually W6 or W7, can be heard around 0100z.

28 Mc. seems still to have had the biscuit, but, nothing daunted, up pops **4XJ** with KH6AGY, KH6SE, KH6AOR, KH6UL and W8ULH/MM.

A few QSLs seem to be trickling through, to **3AHH**: 5A3TZ, MI3LK; to **9YY**: DU1CV, FO8AB; to **7RK**: SU1GG, ZS6YW, 4UAS, YU3AT, DU1EC, YJ1AB, VQ4HJP, ZC4RX, OH5NK, the last three on 21 Mc. **7GM** received a QSL from W1WHR for a QSO in June, '48, post-marked the same time. At that time there was no 7GM licensed and Gordon comments on the efficiency of the QSL Bureau, waiting for a call to be taken out and then sending him QSLs back for a few years.

Two QTHs to mind are: **MF2AE**—Box 5, Trieste; KJ6AX—A.P.O. 105, c/o P.M., San Francisco.

Last month's note re Cocos Island finished up a little haywire as to call sign as I discovered just one day after posting. The new call on Cocos is

VK1BJ, Jeff, ex-VK6JC, operates mostly phone, when I heard him around 1430 Kc. Time at the moment very limited and hopes to spend most of his time on 21 Mc. when he gets that perking which he expects to be about June. Cocos Island time is 3½ hours behind E.A.S.T.

AMATEUR CALL SIGNS

FOR MONTH OF MARCH, 1953

ADDITIONS

- VK**—New South Wales
2CD—Chapman, R. O., 67 Arabella St., Longueville.
ZK—Taylor, A. F. W., 12 Maxwell Rd., Pagewood.
2AIC—Glicker, H. W., 68 Belemba Ave., Lakemba.
2ACU—McPhee, R. B., 1 Hampden St., Dubbo.
2AGX—Browke, B. K., Meadowbank.
2ASU—King, H. S., 19 St. Paul's Rd., Balgowlah.
2AVO—Crichton, J. T., Flat 3, Phillip Court, 39 Horne St., Port Kembla.
Victoria
3AU—Gabel, H. F., 65 Glenhenty Rd., Elwood.
3FN—Perriman, A. M., 4 Bringsa Ave., Camberwell.
3RM—Easterbrook, R. W., Terns Road, Upwey.
3ADD—Daniell, H. L., 2 Flinders St., Mitcham.
3AEN—Semmens, J. L., Postal: 19 Valley View Rd., Glen Iris; Station: Main Road, Clematis.
3APQ—Smith, W. P., 30 Rogers Rd., Moorabbin.
3AFS—Powers, L. A. T., 90 Jackson Street, Casterton.
Queensland
4ZM—F. B. Bond, Boundary Rd., Rainworth, Brisbane.

Western Australia

- 6CC**—Chapman, F. W., Lot 429, Downey Drive, Manning Clark.
Tasmania
7AX—Hubbard, A. 2 Athleen Ave., Lenah Valley, Hobart.

ALTERATIONS

- VK**—New South Wales
2FII—20 Delecta Avenue, Beauty Point, Mosman.
2HQ—21 Coolaham Road, Northbridge.
2M—"Mount Haven," Essex Street, Lawson.
2CH—31 Hackett Gardens, Turner, Canberra.
2AB—C. E. Repatriation Sanatorium, Turramurra.
2AEN—Heathwood Avenue, Lavington.
3AL—172 Stewart Street, Bondi Junction.
2ALM—The Rectory, Cumnock.
Victoria
3BB—14 Langford Street, Morwell.
3CO—32 Stewart Street, Seymour.
3GE—3 Graham Road, Carrum.
3GO—122 MacAlister Street, Sale.
3HD—9 Arkaringa Crescent, Black Rock.
3JO—10 Talbot Avenue, Balwyn, E.S.
3ME—5 Barnes Grove, Chelsea.
3QY—Base Squadron, R.A.A.F., Point Cook.
3XU—Railway Avenue, Geelong.
3XU—69 Murdoch Road, Wangaratta.
3AC—23 Stewart Street, Seymour (Portable).
3AD—119 McCrack Street, Dandenong.
3AN—Scenic Road West, Warragul.
3AST—67 Nunn's Road, Morrongton.

Queensland

- 4BW**—Lloyd Street, Mareeba.
4TS—Station: 33 Wylie Street, Toowoomba.
Postal: Isa Mines State School, Mt. Isa.
4UX—Oak Street, Yungaburra.

Tasmania

- 5BP**—Thomas Street, Murray Bridge.
5DE—Station Master and Postmaster, Copley.
5L—137 Walkerville Road, Walkerville.
5VL—Rut 10, R.A.F. Station, Darwin.

Western Australia

- 6EB**—203 The Strand, Bedford Park.
6FA—C/o, A. A. Aviation Service, Derby.
6RE—C/o, D.C.A. Geraldton.
6RT—School House, Nungarin.
6UP—57 James Street, East Cannington.

Tasmania

- 7JD**—29 Brent Street, Glenorchy.
7KB—17 Linton Street, Upper Burnie.

DELETIONS

- New South Wales:** VKs 2JS (now operating under VK3RM), 2AKZ, 2APO (now operating under VK3APQ), 2AQK, 2ASG, 2ASV.
Victoria: VKs 3DY, 3ADQ.
Queensland: VK4BE (now operating under VK2KZ).
Tasmania: VK1WT.
Territories: VK1FN (now operating under VK3FN).

* 5 Galvin Street, Launceston, Tasmania.

FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

VICTORIAN DIV. V.H.F. GROUP

Once again excellent weather prevailed for the field day on 15th March. On 2 m over 20 stations were active in Victoria as well as a number in N.S.W. and northern Tasmania. Country stations 3EQ, 3UI and 3ZL were set up with portable gear on Tower Hill, Mt. Major and Mt. Buninyon respectively. Metropolitan stations working portable were 3JO at Mt. Bullengrook, 3NW at Ringwood, 3ADU at Mt. Macedon, 3ABA at Mt. Hickey, 3LN at Kellor, 2PN and 2BQ operated from "The Granites" near Kyandra, N.S.W. They made contact with 3UI, and 2PN was heard by 3ADU and 3ABA. Most portables had a good quota of QSOs, 3ZL making 19. Country home stations on were 3JK Wangaratta, 3APF Shepparton, 3UG Rye, and 3AEB of Lower Macdonald; while in the Geelong and Queenscliff area, 3AKE and 3BW came on.

Have you sent in your log for the contest? Please note that logs should be posted to reach the Victorian Division rooms before 7th May. Log requirements and contest rules appeared in the Dec., '52, issue of "A.R."

At the March V.h.f. Group meeting the office-bearers for the ensuing year were elected and are: Chairman, Herb Stevens, 3JO; Vice-Chairman, Fred Ball, 3YS; Secretary, Jim Gale, 3AJG; Asst. Secretary, Bob Stevens, 3OJ; Publicity Officer, Jim Ball, 3ABA.

The next V.h.f. Group meeting is on 20th May at 8 p.m. in the Institute Rooms and Mr. Andy Morrison of the P.M.G. Research Department will give a lecture on the 167 Mc. tests across Bass Strait. He will describe the tx, rx, recording equipment and aerials

being used. It is anticipated that the prizes will be presented to the winners of the v.h.f. field day contest. All are invited to attend the meeting.

Country v.h.f. activity is improving. In that outpost of Victorian civilisation, Mildura, in the Far North West Zone, 3GZ and others are getting down on to 144 Mc.

On 288 Mc. the following are active and looking for contacts: 3AFJ, 3ALK and 3AAF in the Ashburton-Burwood area, 3GQ at Essendon, and also 3PO in Ballarat. Some proposed activity in Geelong is reported. 3PO calls Melbourne every evening at 2000 hours for five minutes then listens for five minutes through until 2030 hours. Tx's at present are p.p. 7193 mod. osc. Super regens serve mainly for receiving. 3AAF has a modified AR301. The aerials are 16 element vertical arrays and 5 element horizontal yagis. A half wave length on this band is a little over 1 ft. 7 inches.

SOUTH AUSTRALIA

Tom 5TL has been spending holidays in the city and gathering gear and information about 144 Mc. Came out to my QTH and set a grid dip osc. on the band, so the Murray Valley should be set up now for further building. Has also a 6J6 tunable osc. with 7 Mc. i.f. channel ready for testing. The Valley, according to reports, has been having fun with transceivers and super regen rx's. Harry 5KW and Murray 5CF making use of the 2 m band also so that there should be a really good possibility for an interesting lot of work on the v.h. frequencies. Hughie 5BC still active with a 4 element rotary on

6 m, while Fred 5MA sticks to a folded dipole.

Locally, the activity wouldn't bear comment. Ross 5FL using 6 and 2 m in the usual hook-up with Pete 5FM, but I think that the regular v.h.f.-ers must be hauling off for the winter months when according to reports we are due for some sporadic E and perhaps some DX! The weather reports and maps show possibilities for a long distance 144 Mc. contact from north to south, but so far we have few stations north of Adelaide to take advantage of the unusual cold fronts which have been occurring lately. Reg 5QR is always on the watch so what about it, Laura, Clare and Pt. Pirie—maybe also Pt. Augusta.

(Continued on Page 10)

MULTIBAND ANTENNA

(Continued from Page 3)

THEORETICAL CONSIDERATIONS

Calculations of radiation patterns of complicated antenna systems can only approximately represent the real circumstances as certain assumptions must always be made. However, careful computations usually lead to results which are sufficiently accurate for practical applications. It is helpful to regard reflections from the ground as being represented by a so-called image antenna below the earth's surface. Furthermore, all possible reflections from surrounding buildings, etc., must be neglected as they would make a calculation impossible.

There are several methods for the computation of radiation patterns. The best general approach is based upon Maxwell's equations and uses so-called radiation vectors and antenna moments for the final evaluation. A discussion of this approach would be beyond the scope of this article, but all interested may peruse the excellent book given as reference. Another satisfactory method is the use of ordinary graphical manipulation involving simple vector analysis. A simplified method of computing complicated antennae is intended to be the subject of another article at a later date.

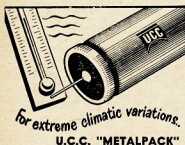
The other interesting property of any antenna is its gain with respect to the radiation of a half-wave dipole, say. This was theoretically calculated for the main lobes in the 5 degree plane with 20 metre operation. The gain was found to be 5.6 db in the in-phase connection, and 6.4 db in the out-of-phase connection.

The antenna performs very well for 20 and 40 metre DX as well as general communication on 40 and 80 metres, so that it can be recommended to anyone who is interested in those branches of Ham Radio. The description has shown that its construction is extremely simple. DX results at the writer's station improved considerably since erecting it, and the antenna was found at many occasions to perform at least as well as "beams."

In conclusion, the writer wishes to take this opportunity to thank the following stations for very helpful reports in lengthy antenna tests: VKs 2APL, 3OL, 3WQ, 3AAF, 3AVW, 7DZ; Ws 1EFN, 7PYV, 0BQP; and DLIEE.

REFERENCE

S. A. Schelkunoff and H. T. Friis, "Antennas: Theory and Practice" (Chapter 12).



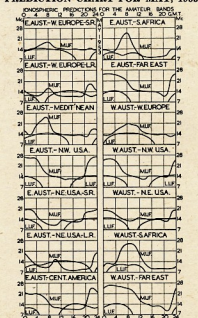
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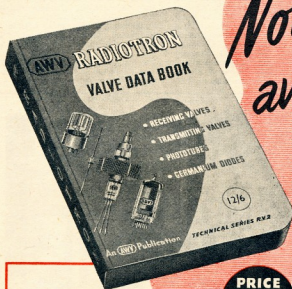
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CONVENTION DINNER

Easter Saturday evening saw a gathering at the Hotel Federal where the Federal Council entertained the Delegates as well as Departmental heads of the Post-master General's Department and the Services. The Federal President, Mr. G. Glover, presided and was most ably assisted by the Federal Secretary, Mr. G. M. Hull, VK3ZS, who acted as Toast-master.

Mr. John Martin proposed the toast to the Wireless Institute of Australia and in doing so said that in the past he had been to many such functions, but always in an official capacity. Now, however, he was extremely pleased to be able to attend as an ordinary person. He had for more years than he cared to remember been associated with Amateurs and paid tribute to those who gave such valuable services in the course of World Wars one and two.

Mr. Geo Glover, VK3GG, in reply, expressed the view that the Institute was growing every day, and they today were engaged in consolidating the position of the Institute and the Amateur in the community.

"The Guests" was ably proposed by Mr. W. G. R. Gronow, VK3WG, who, in the course of his remarks, welcomed visitors to the gathering. He was pleased to see old friends of the Department as well as visitors from the Broadcast Control Board and the Services.

Mr. J. Dobbin responded saying how pleased he was to be present, and wished to apologise for the absence of the Director General who was unable to be present, but nevertheless had expressed his hopes for the success of the Convention.

Mr. Dobbin, looking round, said he thought that there were some "hard boiled" types attending the convention, but he was sure that much good would come of it. The P.O. was always anxious to help as far as they were able, but in these days it was getting harder and harder to make wavelength assignments as the demand had far exceeded the spectrum space. However, Amateurs were regarded as a service, and as such would always receive full consideration of any requests put forward. He hoped he would be able to attend more of these functions.

Lieutenant Colonel Rosblade, representing the Director of Signals, said he enjoyed being able to attend and welcomed the opportunity to support the remarks of Mr. Dobbin. He had been a Ham for 20 years and in that time he had met many Amateurs in the Services, where they had always proved invaluable.

Mr. Cedric Ewin, VK3AGC, Federal Treasurer, proposed the toast to the "Delegates" and in a few well chosen words welcomed the Delegates and hoped that their stay would be a happy one.

The reply to this toast was in the capable hands of Mr. J. B. Corbin, VK2YC, who, in a brief, humorous and straight to the point reply, thanked everyone concerned for such a great time. The hospitality of the VK3 Division seemed to be something unique and proved without doubt the Amateur claim that "Amateurs were friends irrespective of colour, class or creed."

Mr. R. Hugo, VK6KW, proposed the toast "Headquarters Division," saying he was pleased to have the responsibility of this toast. Headquarters Division looked after them during their stay, not only this, they had provided the Institute with Federal Executive. He thought that they in Western Australia could not do better.

The Victorian President, Mr. Gordon Dennis, VK3TF, replied and thanked the proposer for the nice remarks. The Division derived great pleasure in being able to entertain the delegates, and he thought the Convention worth while.

The toasts were followed with a very simple ceremony—that of the official presentation of the Remembrance Day Trophy to the winning Division. Mr. F. Punch, of the P.M.G. Central Administration, made the presentation, saying he felt deeply honoured to be chosen to make this presentation. The

FIFTY Mc. AND ABOVE

(Continued from Page 8)

From the south east comes the following news from Col Ferguson. There are five stations operating on 2 mc: Stuart 5MS, John 5JA, Claude 5CH, Tom 5TW and Col 5CJ. 5TW and 5MS are using converted I.F.F. gear as mod. osc. and super regen rx and cover the local terrain in fine style.

5CH and 5JA use converted AR301 rx's and a modified I.F.F. tx and home built xtal controlled tx respectively with spare bits and pieces of I.F.F. gear for stand-by.

Col 5CJ has an SCR522 modified to work on 2 mc with the usual I.F.F. spare so that there should be no break down in communications in that spot of S.A. The antennae vary from "J" types to 4 element beams with a mixture of vertical and horizontal polarisation for good measure.

There is a very good article on v.h.f. converter design in February "QST" by two engineers of Television Industries Inc., U.S.A., and I am spending some well applied time to glean excellent tips from it. I recommend its reprint to the Editor of "A.R."—SXU.



The above display is portion arranged by the Western Australian Division in the window of a large store in Hay Street, Perth, to commemorate the winning of the Remembrance Day Trophy as well as to create public interest in the Institute and the Amateur generally. The W.A. Division are deeply indebted to Foy & Gibson who made the window space available and sincerely thank the staff responsible for the excellent display.

sentiment behind the trophy was of the highest—that of commemorating the memory of those Amateurs who gave their lives on active service. He had much pleasure in presenting the trophy to Mr. Ron Hugo representing the Western Australian Division.

Mr. Hugo said he had much pleasure in accepting the trophy on behalf of his Division, which they had won after much effort. He thought, as Mr. Punch expressed it, the thought behind the trophy inspired the effort to win, and he hoped that his successor would be very proud to accept it next year.

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ERRATUM, VK-ZL CONTEST RESULT

In the Aus. C.W. Section, the call sign "VK3AAH" should read "VK3AHH."

IT DID HAPPEN IN ENGLAND

Two and a half years ago the R.S.G.B. offered to set up a communication network to meet any national disaster on land, at sea, or in the air. That offer was declined. Why? Because the G.P.O. had advised the appropriate Ministry that it was quite capable of handling any emergency without the help of Radio Amateurs.

It is worth recording the reply the Society received at that time from the Ministry of Transport. It read:—

"The Minister much appreciates the interest shown by your Council and your members in the arrangements made for receiving distress messages from vessels at sea and is grateful for their offer of co-operation. After discussion with the Postmaster-General, however, he is satisfied that the normal listening watch maintained by the stations of the mobile service should be adequate in all ordinary cases to ensure that any distress message is picked up and acted on. He feels that the occasions on which it would be necessary to call on the services of Amateurs, or other members of the public would be so exceptional and, therefore, so few and far between that it would be more satisfactory not to lay down any hard and fast procedure, but to make the necessary arrangements in the light of the requirements of each individual case."

During the last few hours of January, 1953, a disaster of immense magnitude struck the coasts of the British Isles. Post Office telephones, Government wireless stations and the utility services were put out of action for days on end. Radio Amateurs in these stricken areas, ignoring the terms of their licence, but feeling sure that Public Opinion would support them, immediately placed their stations and their experience at the disposal of the authorities. In Lincolnshire, for example, when Humber radio station was put out of action by the floods, local Amateurs maintained a continuous watch on the shipping frequencies. How well they did their job no one will ever know unless an enterprising journalist has been able to drag out a story. Four times in a few hours Grimsby and Hull Radio Amateurs intercepted distress calls from ships at sea. Yet, only a few months ago they, and we, were told "that the Postmaster-General is satisfied that the normal listening watch maintained by the stations of the mobile service should be adequate in all ordinary cases to ensure that any distress message is picked up and acted upon." What, may we ask is an ordinary case?

To the average British Amateur it seems incomprehensible that the Post Office can be so short-sighted—so jealous of its rights—as to spurn genuine offers of help.

These words were penned at the height of the disaster and long before

the Council of the Society had had a further opportunity to review the situation, but we should be failing in our duty if we omitted to place on record, once again, our serious concern that no provision has yet been made by the Government to establish a National Emergency Amateur Radio Communications Service.

Is there no one in the present Government sufficiently powerful to say that the co-operation offered by the Radio Amateurs of the United Kingdom MUST BE ACCEPTED?

[The above extract from the R.S.G.B. Bulletin should inspire every able bodied Ham to have emergency equipment available for any crisis so that the authorities in Australia could never point the finger and say that the Amateurs were not prepared.—Federal Executive.]

IT COULD HAPPEN HERE!

ACCURATE FREQUENCY TRANSMISSIONS FROM VK3WI

The next Accurate Frequency Transmission will take place on Thursday evening, 21st May, 1953, on the 3.5 Mc. band. Details of the operating procedure and times of operation will be found on page 6 of the February, 1953, issue of this magazine.

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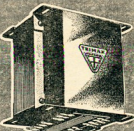
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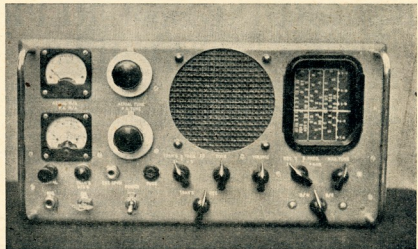
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FEDERAL

EASTER FESTIVAL CONVENTION

The Federal Convention was held over the Easter holidays at which the following members of the Federal Council attended:

George Glover, VK3AG, Federal President. Bill Gronow, VK3AG, Federal Vice-Pres. Harry Kinner, VK3KN, Fed. Public Officer. Cecil Egan, VK3AG, Fed. Treasurer. Max Hull, VK3ZS, Federal Secretary. John Ouse, VK3AKO, Asst. Sec. Jim Corbin, VK3AG, Asst. Sec. Vaughan Wilson, VK3VW, N.S.W. Observer. Fred Ball, VK3YS, Victorian Delegate. Gordon Dennis, VK3YS, Victorian Observer. Harry Chapman, VK3GU, Vic. Observer. Arthur Burton, VK4FE, Q'land Delegate. Jack Coulter, VK3JD, South Aus. Delegate. Ron Hugo, VK6KW, West. Aus. Delegate. Bob O'May, VK7OM, Tasmanian Delegate.

Under the competent chairmanship of the Federal President, George Glover, the discussion of the agenda got away to a good start after the preliminary adoption of last year's minutes and this year's reports had been dispensed with, and the Federal Policy Book had been reviewed. All redundant matter removed from therein.

Due to a very much smaller agenda this year than has been the case since Federal Conventions were held, a great deal of greater time was devoted to each item with the favourable result that all contentious thought was given. Free expression of opinion in the Convention table with the thought that time had stopped him from putting the views of his Division adequately. This made for a more desirous and convivial atmosphere in which a lot of discussion evolved to the credit of the members of the W.I.A. and Amateur Radio.

Despite the small agenda, the Convention ran on until 6 o'clock on Monday evening, 6th April, a tribute to the Chairman who permitted an extension of the Convention table. This led to more detailed discussion than would have otherwise been possible; this would not have been possible at the extra time in defence of the administration of the Institute and the betterment of conditions for the Amateur. Chairman and General to the W.I.A.

The Federal Dinner was held at the Federal Hotel, Collins Street, Melbourne, on Saturday night, 4th April, where a congenial evening was had by all present. In addition to members and official members of the Federal Council, the following notoriety were in attendance:—

LT-Col. R. K. Roseblade, representing the Department of the Army; Sir James J. Hargrave, representing the Director of Telecommunications and Radar, R.A.A.F.; Mr. P. J. Dadds, representing the Australian Broadcasting Control Board; Mr. Frank PUNCH, Central Office, Wireless Branch; P. M. Dobbin, Superintendent of Wireless, Victoria, who also represented Mr. Chippindall, Director General, Posts and Telegraphs, P.M.C.

Sincere apologies were received from Mr. H. L. Anthony, M.H.R., Postmaster-General; Hon. W. S. Kent Hughes, Minister for the Interior and Minister of the Army; and the drop, Director of Telecommunications and Radar, R.A.A.F.; Colonel L. J. Bruton, Director of Signals, Department of the Army; the Director of Naval Communications, Navy Office, Melbourne; Mr. L. F. Pearson, Postmaster-General; Department of the Interior; Office of the Wireless Branch; Mr. Chippindall, Director-General, Posts and Telegraphs, Postmaster-General's Department; and Mr. R. G. Cebere, Chairman of the Australian Broadcasting Control Board.

Although the last mentioned gentlemen were unable to attend, they are a tribute to the Institute that their interest in the subject was duly represented. They expressed their personal regrets in writing; it confirms the fact that although these responsible Ministers are involved in important posts in the Commonwealth's Administration are busy people, they are not too busy to overlook the importance of Amateur Radio in the field of general communications and to evince an interest in their activities.

The Institute is sorry that on this occasion Mr. Cebere was unable to attend. On the next occasion they will be able to attend in person.

For the first time at a Federal Convention, it was possible to keep the Sunday afternoon free from Convention business. Advantage was taken of this to suitably entertain the Delegates with a catered trip into the bush, this proving to be a delightful break from the many hours of serious discussion over the Convention table. Although it may not be possible, it is hoped that such a break can be a regular event as a "breather" from the harder work of the Federal activities.

Some interesting matters are scheduled to rise out of this year's Convention of which more notification will appear in these columns for the interest of the readers when the official minutes have been forwarded to Federal Council and the year's work commences.

MEETING WITH THE DIRECTOR-GENERAL

Members of the Federal Executive had the privilege to meet and discuss matters of interest to the Amateur movement in Australia with Mr. Chippindall, Director-General, Posts and Telegraphs, Postmaster-General's Department, during April, arising from which the W.I.A. is happy to announce that the Department has sanctioned Technician Licenses in accordance with resolutions of the Federal Council.

Although official appointments are being given, it will be some little time yet before the final details are worked out and the changes in the field of Amateur Administration effected to cope with the new license.

The function of this license is to permit the highly qualified technical person to exercise master the more code to enjoy a limited privilege in the transmitting field where he can further his technical knowledge, and to widen the field of research into the v.h.f. and u.h.f. wherein the future of Amateur Radio lies as we know it today.

The license will be limited to operation on 144 Mc. and above, but this should be no deterrent to the keen and practical experimenter who desires the privilege to transmit. One of the most important aspects of this form of license, however, is the great impetus it will give to v.h.f. networks designed for Civil Defence Emergency Services. In the past few years, it will be expanding into one of the most important fields of Institute activity.

At present the proposed v.h.f. license has not seen its way clear to approve of the Novice License, although advice has been received that further investigations are to be made relevant to this matter.

—Federal Executive.

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Following are the current Divisional QSL Bureau Managers and addresses:—

Federal: R. E. Jones, VK3RJ, 23 Landale St., Box Hill, E.I., Vic.

N.S.W.: J. B. Corbin, VK2YC, 76 Maloney St., Eastlake, Sydney (Inwards and Outwards).

Vic.: Graham Roper, VK3ZB, 26 Lucas St., South Caulfield, Vic. (Inwards).

Frank O'Dwyer, VK3P, 190 Thomas St., Hampton, S.T., Vic. (Outwards).

Qld.: Jack Files, VK4JF, Vanda St., Buranda, South Brisbane (Inwards and Outwards).

South Aus.: Geo Luxon, VK5RX, 6 Brook St., West Melbourne, South Aus. (Inwards and Outwards).

Western Aus.: Jim Rumble, VK6RU, Box F319, Perth, West Aus. (Inwards and Outwards).

Tasmania: Inwards: R. Allen, 6 Thirza Street, New Town, Tasmania. Ray Calvert, 316 Park Street, New Town.

W. A. Winchester, Manager of the International Short Wave League Correspondence Bureau, with curators in the U.K. at Eastbourne, Sussex, England, writes inviting readers of "A.R." who would like a radio pen friend to communicate with him. He undertakes to place applicants in touch with a pen friend in England or any other country, so long as their main interest is radio. Applicants should state whether they are a V.L. or whether a transmitting Amateur or a listener. He desires inclusion of an I.R.C. for reply purposes.

It is understood that QSLs from ZCZMAC will not be recognised as he was not properly licensed.

VSAC has stated that AC3AA is active on 14 Mc. from Bhutan, but has not yet been heard in VS8.

QSL sources indicate that ZC3AA is due to start up from Christmas Island about the end of April.

KV4AA states that CEOAA is due to commence operations from Easter Island about the end of March.

SA17Z, active on 14 Mc. c.w. with QTH as Box 372, Tripoli, Libya. He QSLs. Details of the return trip of Felix Franchette, F3GQ, ex-FK3AG, to Noumea have come to hand. Felix, who was in the Pacific from Marseilles on 4th May and the 45-day trip on the maiden voyage of the "Tahtien", will be in New Way at 10.15 P.M. on 15th May. France, Curacao, Papete and Port Vila. There will also be a brief stay at Cristobal before proceeding through the Panama Canal. Felix will be in New Way at 10.15 P.M. on 15th May, and will, by fair means or foul, extract from him a QSL for one, VK3RJ, who has awaited a card for any of five contacts for many years. FORAC QSLs everybody else but VK3RJ. Anyone desirous of writing Felix en route should address letters to him as "1st Class Passenger, M/S Tahtien, Care Messageries, Maritimes," at one of the ports named above. Following QTHs from: BE815Z, JAA4A, Tokyo, Japan; West 11th St., South 6th Ave., Sapporo, Hokkaido, Japan; PJ1UF is now PJ2CB, J. L. Sterke, Pres. Rooseveltweg 346, C. de Koning, Leidschendam, Holland. Care BPM Radio Station, Balikpapan, Borneo, Indonesia: SA3TR, John Jacobs, Box 372, Tripoli, Libya; VP7NZ is now CN8GK.

NEW SOUTH WALES

The March meeting of the New South Wales Division was held at Science House on Friday, 27th, with the President, Mr. John Moyle, in the chair. As usual, he has not missed a meeting during the two years of his Presidency despite illness, holidays and personal inconvenience. He has not missed a meeting since the year before the Annual General Meeting and the main business was the discussion of Convention agenda items and the briefing of the Federal Council and the N.S.W. Divisional Observer, Vaughan Wilson. As is usual with this kind of meeting the attendance was poor, only 35.

After the formal business had been completed, the President gave a summary of recent events of interest including some comments on the proposed changes in the Groups into which he has put much thought and time. He spent most of his annual leave counselling and working with the members of the State getting the reactions and feelings of the Country Hams to the proposal. He found plenty of enthusiasm in all quarters and the plan seems assured of success.

After discussion of the Convention agenda items, our valuable stand-by, Angus Robertson, who had travelled all day to be there in time, got up prepared to lecture on a subject which might be requested. We knew from past experience that he could more than hold our interest on any subject that he wished to discuss. A couple of questions on aerials led to a very interesting talk on ground plane aerials. Few of us realised that there were so many involved in getting the humble ground-plane to work as it should and those of us who had failed before are gratified to think that we may now be able to do so. The speaker then asked that an article in "A.R." on this subject would pay off handsomely. Who can persuade Angus? The speaker then asked that an article in "A.R." on this subject would pay off handsomely. Who can persuade Angus? The speaker then asked that an article in "A.R." on this subject would pay off handsomely. Who can persuade Angus?

By the time these notes are published a new Council will have been elected. We wish them well.

COALFIELDS AND LAKES ZONE

2ANU worked portable on 80 and 40 from Terrigal during his holidays. He has now returned and is designing a super freq. meter and re-designing his private power house. 2YU is on 80 and 40 and occasionally operates on 40 and 80. 2YL has been active again and still manages to grab some nice DX on 20. 2PZ has been heard on the air but still pursues the ideal rx. 2ADT has been busy and not on the air as much as usual. However, there was some activity on 20 and 40 and 2YU and 2PZ paid him a visit. The Kurri boys seem very quiet of recent weeks.

Some of us may make adjustments to the house. Major has a visit from 2LR for a few days. Little has been heard of 2KR and 2GA for some time, but Cec. had a spot of rx trouble which he has been clearing up. Little has been heard on 80 from his new location and threatens to out-do 2KR in the matter of QSLs. 2YU has been heard and from his AC3AA sandhill and still waiting the arrival of some a.c. power.

HUNTER BRANCH

The annual election of officers was held at the March meeting of the Hunter Branch. Those elected were—President: Mr. John Clarke, 2DZ; Secretary: Mr. Varley Titon, 2SF; Treasurer: Mr. Bill Hall, 2XT; Zone Officer: Mr. Les Sparkie (waiting on his call sign). Appreciation was expressed for the work of Lionel Swain, 2CS, who, by his ability as President in the past, has helped the Hunter Branch to its present position. Dave Duff, 2EO, again represented the Divisional Council and "Taree" Bill also put in a welcome appearance. Max 2OT, Harold 2AIA, and Fred 2AGY gave a lecture and demonstration of v.h.f. gear.

Ernie 2FF has at last graced 40 mx with his presence and was first contact of the Technical College Radio Club. Dave 2BZ has had good contacts from Soldiers Point, also on 40. Bill 2AXM's "Pip Squeak" still with 59 signal. Edgar 2MR with hefty sig due to new rectifier he says. WVP recognised as champion rooster catcher.

Bill 2BJ still boat building. John 2XQ building electronic key. Norm 2ANA visited Wollongong recently. Neil 2XY now has his new car. Harry 2AFA still active on 40 and 20 c.w. 2AKP heard recently on 80. Ken 2KG kept busy on t.v. activities for local h.c. station. Varley 2SF still building his modulator. Ron 2ASJ relaxing after two busy years as zone officer, but always willing to render every assistance to new zone officers.

If these notes appear shorter than usual, put it down to the fact that your new scribe is making his first attempt and will improve, however, as experience is gained.

SOUTH WESTERN ZONE

Ron 2RH at Yerrinbrook making radical changes to his ATs for operation on 80, 40, 20 and 15 mx, also in the process of building a new modulator, best of luck with the change-over. Ray 2APZ at Leeton active on 40 and 80 with a good rig. Ray has been playing with a 10L with a view to portable operation. Peter 2AFP at Montegale heard on 40 with a fine sig, he has a fine business recorder judging by the playbacks. Roy 2DO at Yass heard on 40 with his usual fine signal and modulation. Hope you get the electronic keyer working Roy. Stewart 2PL at Griffiths not heard for some time, but it should not be long now that the new rig must be nearly ready. What say Stewart?

Geoff 2BQ and Ross 2BN, of Tumut, made the trip to the Granites again on Sunday, 15th March. Had a fairly good day, some of the stations worked on 144 Mc. being 3UL, 2BW and 2AJO—sig all ways being good copy. Alf 2BW, portable 144 Mc. at Alfred Town, was worked for the first time on 144; fine work Alf. Not much news for the zone, so how about passing on to me what you fellows are doing some time.—2AJO.

NORTH COAST AND TABLELANDS ZONE

Not much in the way of news as conditions have been such as not to permit of hearing North Coast stations. We give welcome to two new Hams in the persons of 2ASS, of Murwillumbah, who incidentally quite a number will have met at Urunga, and 2ASJ in Tamworth.

The approach of the Urunga Convention brought a lot of stations on to 40 mx that haven't been heard for quite a while, and included 2LH, 2UC, 2AWS, 2APB, and 80 mx also produced some fine sigs over the last weeks. A few travellers are passing up or down the Coast, Perc 3QV headed for Sydney, whilst 2AJZ and 2XT meandered through to Brisbane and 2ZY to Sydney. Taree Bill 2AEY on the other hand is immobile due to a damaged truck. Taking lessons from Peter? A little activity is astir on 20, Alan 2ASO now being able to put out a sig whilst 2ZY up in Murwillumbah has his beam towards Brisbane and hoping someone will answer his CQs.

Our old friend, Norm Moody, spent quite a time at Urunga prior to the Convention and managed to get a nice haul of tailer. Like several others, Urunga has him "in" and soon we may see a new shack on the water front. Grief had the misfortune to "blow up" the power pack on his modulator, but seems to be under way again. 2AHH has fitted a crystal filter to copy some of the rare DX, whilst Perc 2QV is getting out quite well on his new 2 element rotary beam on 20. 2ACU, 2ABU, 2FH and 2XO due at Urunga early to have everything ready for the "event of the year."

VICTORIA

The April meeting was held on 1/4/53 at the usual location. This meeting was the Annual General Meeting of the Division, followed by an extra-ordinary meeting to adopt the Uniform Constitution.

The election of office-bearers resulted as follows: President, Gordon Dennis; Councillors: Fred Ball, Harry Chapman, Gordon Dennis, Jack Duncan, Col Gibson, Steve Grimley, Len Jackson, Geo Manning. To these gentlemen go our good wishes for a successful term of office.

The recent tx hunts were so well commented on that the organisers are arranging for these to be made a regular event. The population of this "City of Parks and Gardens" was greatly intrigued by the cars tearing round with loops of all sizes, shapes and colours, and we, at least, attracted the attention of a patrol car. It was pleasing to see an associate member first in. Must see that guy and get a few clues.

Heard a VK3 calling VK3UZ a couple of weeks back. Listened round for a while but couldn't find him. Sorry now I didn't give the VK3 a call. 3RA showed up a few times recently after missing for eighteen months. 3AWW heard testing on 40, but didn't stay for a QSO. 3JZ on again after eight weeks shut down. Now has new v.f.o.

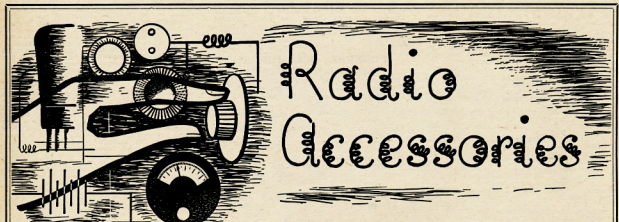
Have had a few visitors during the last week or so, including 3ADO, 3ALK, 3RN, 3AAF and Associate Eddie whose surname I forget. Always pleased to see anybody who calls.

Speaking of visitors, still no sign of the seconds from VK3. No doubt having one in each of the pubs before coming over. If my surmise is correct, won't see them for another six months. If, on the other hand, they decided to visit "all" the churches, they are long overdue. With I'd been at the last VK3 Tender Night, at a shilling, I could not have lost. After all, the family has made a living from tallow for 40 years and at today's price, the profit, after paying "exes" would have paid for a 75A—well almost.

Still waiting for somebody to send me news of what is going on round the bands. Maybe some s.w.i. will help out—"perlease"!!!!

HIDDEN TRANSMITTER HUNTS

A most interesting and enjoyable afternoon was spent by those who participated in the W.I.A. Victorian Division's Hidden Transmitter Hunt on Sunday, 22nd March. 25 competitors, including many associate and student members started off in the search at 2 p.m. The first to locate the tx was Bob Hildebrand, of Moorabbin. Second and third being Len 2LN and Don 3ALQ, respectively. Hildebrand's time was 45 minutes.



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The tx, a Type 3 Mk. II., running approximately 20 watts, located about a mile north of Bulla township was hidden in a large blue-stone drain under the main road. There was just one room, and the operator sat on a stool alongside the tx, automatic keyer and battery! The aerial, a 30 ft. vertical, was fixed to a concrete base.

By 4 p.m. approx. 12 competitors had arrived and the tx was then closed down after an announcement was made on voice giving full details of the location of the tx and the searching. One man, who actually arrived in the vicinity first, shot right past the tx and continued on his way. The tx was then closed. Later on the competitors, some with their XYLs and families, and about half a dozen non-competitors and a few of the organizers, then, adjourned to the Bulla Picnic Ground for refreshments and comparing of notes. Judging from comments, everybody, including XYLs and families, enjoyed the event and looking forward to the next one.

Sunday, 15th April: The location this time was the Williamson Gardens, 22 p.m. first to arrive at the spot was Ed 3EM who took 28 minutes to make the connection. Then Don 3ALQ, whose time was 28 minutes. In third place was Jack 3VC who he found the tx in 28 minutes. Fourth place was taken by Bob 3NZ. Len Monzer got in trouble with his car and XYL, he arrived at the location after the signal had gone off the air, but he had to open his inspection sheet to find out where the tx was).

The next Hunt organised will be held on Sunday, 16th May. The same place of assembly and the same time of starting, 2 p.m. Please note the change of frequency to 3325 Kc.

Col 3FO and his willing helpers are to be thanked for their work in organising the event.

CENTRAL WESTERN ZONE

Congratulations to the Lubbeck 3Z for their fine literary effort last month. It stirred up the zone to the tune of eight stations taking part in a recent 20 mx hook-up, and that is no mean feat. However, we welcome such fine turnout on Wednesday nights and hope it will improve as conditions on that band improve. The remaining of winter. Most item of discussion has been the field day at Warwick which will probably be a thing of the past when you read this, but hope will be useful to remember.

20 mx DX hounds in the zone seem to be waiting for the thin time of it was some of the worst conditions for years, however, some of the band seems to have picked up and have burnt some midnight oil up this way to work LA, OH, DL, etc.

A surprise visit to Byron 3TA found him deeply engrossed with a c.r.o. What about a talk to the users of it, the next Convention Byron?

EASTERN ZONE

Things are very quiet in the zone these days and a general increase in activity is definitely called for. 3WE is complaining about the small numbers on the zone hook-ups lately and he thinks it is time some of the chaps blew the dust out of their rigs and came on. The most notable absentee is the once regular 3PRI who has been out of the zone for some time again just to show the boys you still know how. The rest of the Leongatha Hams are waiting to hear from the zone.

After all this complaining, it is pleasing to note that 3BB has come out of retirement with 38 and 39. Dave 3SS and a chap called 3AOD is back on again, this time from Warrigul, my, you certainly get around George. 3ANV very busy these evenings helping the cinema operators at the local theatre.

There will probably be a couple of new call signs in the zone by the time this goes to print. David 3JRK op of 3SS, and John 3Batterick, better known as the second op, of 3IZ, passed the last A.O.C.F. exam with flying colours. The boys who know you, you need to do it. What about putting a bomb under Alf John? I think there should be another call sign. I don't want to be heard from the new location at Maryborough, but I am looking forward to hearing you again Peter.

This month's meeting of the sub-branch was held at the residence of 3SS and a most interesting time was had by all. After the business had been dealt with, Alan 3AFA showed some very fine films after which Keith 3JRK conducted the meeting to the home of a friend who had a very fine radiogram and record collection. The boys to inspect. The time was 10.15, a 16 valve job and the audio end is very fine indeed. The speaker is set into the brick wall of his house, thus saving the wall as a buffer. The overall effect is very good and is very nearly perfection.

FAR NORTH WESTERN ZONE

This month activity has been centred round the 2 mx band with Chas 3TI and Ian 3AMJ

very busy building gear. Chas has a m.p.s. on the band and Ian has converted an L.F.P. unit which is operating although to date he has been unable to make contact with Chas in Victoria. Max 3ZZ is getting some juice into a four element 144 Mc. beam and has been heard by 3TI.

During the past month we have had the pleasure of visits from the following Hams: 3ACI, 2DQ and 2AJI. Dudley 2DQ passed through Mildura from Broken Hill to Melbourne, and the father he called at Ouyen and enquired at the Post Office to ascertain if there were any Hams in Ouyen. He received a negative answer and was on his way. Fred 3FC is busy roaring his staff up for not informing him of the enquiry. Fred 2AJI is ex-3AFC and is located in Benalla. Good to see you again Fred, hope you have ironed out the trouble in your modulator. We will keep him posted for you on Sundays.

Jim 3AFP spent most of Ballarat and visited some of the gang in that fair city. Hope to hear you on the air on Sundays now that the harvest season is over. Noel 3AUG been busy with the harvest but manages to get on 14 Mc. and work the odd bit of DX. Harry 3BIF inactive but threatened to get on near future. Bill 3AJU heard on 7 Mc. on Sundays and now has plate and screen modulation on the Type 3.

GEELONG AMATEUR RADIO CLUB

The first meeting of the month was a transmitter hunt conducted by the club. The tx was hidden at Brimley, approx. nine miles from Geelong by 3WT and J. Beckingham. Only two cars were out to look for the tx. The first to arrive were Ted Blackney and Bill Zimmer, followed 15 minutes later by 3AKE with 3AIPK and 3ALG. The following meeting 17 members were present. Mr. Geoff Wood was welcomed as a member. A visitor was Mr. Stephen Aros who was nominated for membership. Ted Blackney and Bill Zimmer led the more instructor, Bob Wooley 3IC, for his coaching. These two members were successful in the last A.O.C.F. exam. The syllabus for the evening was a discussion on noise limiter. Each member related his experiences and results of the various types they had tried. Members of the club who took part in the tx hunt in Melbourne gave a report on the activity of the day.

SOUTH AUSTRALIA

PRO 5PS BY 5MD

The monthly general meeting for March, '53, was held at 17 Wymouth Street, the guest speaker was Mr. C. Mutton of the University of Adelaide. He was on a trip from Australia to England by ship and from Calais through France, Switzerland, Germany, Italy, thence through Austria, Germany, Holland and Belgium. Mr. Mutton showed us many photographs of the lakes and snow covered mountains in Switzerland were a joy to behold. Mr. Mutton's bright and breezy commentary held all present spellbound, and some of the stories he told kept everybody present in fits of laughter; unfortunately some were of the type that caused me to laugh otherwise you too could be highly amused from some of the things he saw. A hearty vote of thanks was given to Mr. Mutton for the evening and he was warmly welcomed and carried with acclamation by all present. We have found in VK3 that it does the world of good to occasionally have a lecture right apart from Radio and Mr. Mutton's promise at some future date to come along again and deal only with London will be a lecture that will be looked forward to with great enthusiasm.

By the time these notes are printed, Melbourne will have returned to normal again after having been honoured by the presence of no less a person than the President of the VK3 Division in person. Whilst he was walking down the street I heard a man say to his wife, "Gee, I've seen that chap before" and his wife replied, "Yes, it's the same one that you see at Luna Park," which brings me to the "Scoop of all scoops" (vide "radio with the news persons").

The residents of that "Nouveau riche" suburb of Rosedale were astounded to hear that "fat muscular gentleman who lives on the corner of a certain street" was seen picking up his friends with a motor car and wearing (the bit that is held up by the rolls of fat around his middle) dangling around his ankles. Fortunately for him and the rest of the public, he was wearing a long flannel undergarment, his long legged flannel undergarment, where there they have been and saved him from an appearance in the local court. I can't give you any clues but I will say that this is a little Audrey story.

Imitation, they say, is the sincerest form of flattery, and it was with pleasure that we read in the VK3 notes, that 5JD was asked by the Melbourne meeting to advise them on the

procedure of a successful tetter night, as was held in South Australia.

The new Students' Class started off with an attendance of 14 budding Hams-to-be. They were introduced to lecturers John Allan and Arthur Sheard by the Membership Organiser, Mr. Joe McAllister. Also present to make these new Hams feel at home were the Secretary and the Treasurer and Associate representatives, Mr. C. Sepistatzer and Mr. Jim Paris.

Among the visitors to "The City of Churches" during the month were Jack Quirk (6S) and Malc. Urquhart (6MU). Jack is an old friend of many VKs and we hope to see more of him on his return from the Eastern States. Malc. 6MU was completing a holiday that started by ship and ended up by train. Some of Malc's remarks about the fleecing so and so's that abound in those Eastern States led me to believe that Malc. doesn't mind paying for service, but like all of us, he hates to be phibbed. Might I suggest Malc. that you spend your next holiday in an honest State. We can show you just as good scenery as they can and the majority are good honest public servants (travelling 800 and 850), but do not poke your nose into the B.B.S.T.I.'s or those Eastern blokes will seem like lambs.

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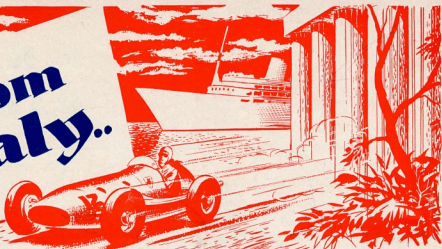
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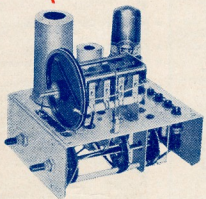
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